WHAT IS CLAIMED IS:

1.   A system for delivering an electronic document, comprising a transcoder proxy coupled to receive the electronic document in a first digital format, wherein the electronic

5   document includes an element, and wherein the transcoder proxy is configured to assign a unique identifier to the element and produce an original script that includes: (i) at least a portion of the electronic document expressed in a second digital format, and (ii) the element and the identifier assigned to the element.

10   2.   The system as recited in claim 1, wherein the transcoder proxy is further configured to store the element and the identifier assigned to the element for future use.

3.   The system as recited in claim 1, wherein the first digital format is a text-based markup language.

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4.   The system as recited in claim 3, wherein the text-based markup language is hypertext markup language (HTML) or extensible markup language (XML).

5.   The system as recited in claim 1, wherein the first digital format is POSTSCRIPT,

20   portable document format (PDF), or advanced function printing (AFP).

6.   The system as recited in claim 1, wherein the second digital format is a scripting language.

25   7.   The system as recited in claim 1, wherein the transcoder proxy is further configured to:

form a model of a logical structure of the electronic document;

use the model to produce the original script; and

provide the original script.

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8.   The system as recited in claim 7, wherein the model also defines methods for

accessing and manipulating the document.

9.   The system as recited in claim 8, wherein the model is a document object model

10   (DOM).

10.   The system as recited in claim 7, further comprising:

a client machine coupled to receive the original script and configured to use the

15   original script to present the portion of the electronic document.

11.   The system as recited in claim 10, wherein the client machine is further

configured to:

20   generate an event in response to user input;

associate the event with the element within the original script; and

provide the event and the identifier assigned to the element associated with

25   the event to the transcoder proxy.

12.   The system as recited in claim 11, wherein elements of the electronic document are associated with corresponding identifiers within the model, and wherein in response to the event and the identifier provided by the client machine, the transcoder proxy is configured to:

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    access the model using the identifier;

    use the model to produce a modification script, wherein the modification script differs from the original script; and

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    provide the modification script to the client machine.

13.   The system as recited in claim 12, wherein the client machine is coupled to receive the modification script and configured to use the modification script to modify the

15   presented portion of the electronic document.

14.   A system for delivering an electronic document, comprising:

    a transcoder proxy coupled to receive the electronic document in a first digital

20   format, wherein the electronic document includes at least one element, and wherein the transcoder proxy is configured to:

    assign a unique identifier to each element of the electronic document;

25   form a model of a logical structure of the electronic document;

use the model to produce an original script, wherein the original script includes at least a portion of the electronic document expressed in a second digital format, and wherein the original script includes at least one element and the identifier assigned to the element; and

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provide the original script; and

a client machine coupled to receive the original script.

10   15.   The system as recited in claim 14, wherein the client machine is configured to:

use the original script to present the portion of the electronic document;

generate an event in response to user input;

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associate the event with the element within the original script; and

provide the event and the identifier assigned to the element associated with the event to the transcoder proxy.

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16.   The system as recited in claim 14, wherein the model also defines methods for accessing and manipulating the document.

17.   The system as recited in claim 15, wherein the model is a document object model

25   (DOM).

18.   The system as recited in claim 14, wherein the first digital format is a text-based markup language.

19.   The system as recited in claim 18, wherein the text-based markup language is hypertext markup language (HTML) or extensible markup language (XML).

20.   The system as recited in claim 14, wherein elements of the electronic document

5   are associated with corresponding identifiers within the model, and wherein in response to the event and the identifier provided by the client machine, the transcoder proxy is configured to:

access the model using the identifier;

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use the model to produce a modification script, wherein the modification script differs from the original script; and

provide the modification script to the client machine.

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21.   The system as recited in claim 20, wherein the client machine is coupled to receive the modification script and configured to use the modification script to modify the presented portion of the electronic document.

20   22.   A transcoder proxy, comprising:

a synchronous document object model (DOM) generator adapted to receive an electronic document in a first digital format, wherein the electronic document includes at least one element, and wherein the synchronous

25   DOM generator comprises an identifier (ID) generator configured to assign a unique identifier to each element, and wherein the synchronous DOM generator is configured to:

form a pre-transcoded DOM representing a logical structure of the

electronic document, wherein elements are associated with

corresponding identifiers within the pre-transcoded DOM; and

5   provide a first portion of the electronic document in the first digital

format; and

a transcoder coupled to receive the portion of the electronic document in the first

digital format and configured to:

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translate the first portion of the electronic document from the first digital

format to an original script in a second digital format, wherein the

original script includes a element and the identifier assigned to the

element; and

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provide the original script.

23.   The transcoder as recited in claim 22 wherein the synchronous DOM generator is

further configured to:

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receive DOM access commands;

access the pre-transcoded DOM using the DOM access commands; and

25   provide a second portion of the electronic document in the first digital

format.

24.   The transcoder as recited in claim 23, wherein the transcoder is further configured to:

receive the second portion of the electronic document in the first digital format;

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translate the second portion of the electronic document from the first digital

format to a modification script in the second digital format; and

provide the modification script.

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25.   The transcoder proxy as recited in claim 22, wherein the first digital format is a text-based markup language.

26.   The transcoder proxy as recited in claim 25, wherein the text-based markup

15   language is hypertext markup language (HTML) or extensible markup language (XML).

27.   A client machine, comprising:

an output device; and

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a user agent coupled to the output device and adapted for coupling to a transcoder

proxy, wherein the user agent is configured to receive an original script

from the transcoder proxy, and wherein the original script includes an

element and an identifier assigned to the element.

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28.   The client machine as recited in claim 27, wherein the user agent is further adapted to:

     form a transcoded DOM in response to the original script, wherein the transcoded

5   DOM is a representation of the portion of the electronic document;

     use the transcoded DOM to produce output commands;

     provide the output commands to the output device;

10   generate an event in response to user input;

     associate the event with the element within the original script;

15   provide the event and the identifier assigned to the element associated with the

          event to the transcoder proxy;

     receive a modification script from the transcoder proxy; and

20   modify the transcoded DOM in response to the modification script.

29.   The client machine as recited in claim 28, wherein the output device is a display device or a text-to-speech converter.

30.   A system for delivering an electronic document, comprising:

a transcoder proxy, including:

5   a synchronous document object model (DOM) generator coupled to

receive the electronic document in a first digital format, wherein

the electronic document includes at least one element, and wherein

the synchronous DOM generator comprises an identifier (ID)

generator configured to assign a unique identifier to each element,

10   and wherein the synchronous DOM generator is configured to:

form a pre-transcoded DOM representing a logical structure

of the electronic document, wherein elements are

associated with corresponding identifiers within the

15   pre-transcoded DOM;

provide a portion of the electronic document in the first

digital format; and

20   a transcoder coupled to receive the portion of the electronic document in

the first digital format and configured to:

translate the portion of the electronic document from the first

digital format to an original script in a second digital

25   format, wherein the original script includes an element and

the identifier assigned to the element; and

provide the original script; and

a client machine coupled to receive the original script and the modification script,
wherein the client machine comprises:

an output device;

5   a user agent coupled to the output device, the transcoder, and the user
interface generator, wherein the user agent is configured to:

form a transcoded DOM in response to the original script from the
10   transcoder, wherein the transcoded DOM is a representation
of the portion of the electronic document;

use the transcoded DOM to produce output commands; and

15   provide the output commands to the output device.

31.   The system as recited in claim 30, wherein the client machine is further
configured to:

20   generate an event in response to user input;

associate the event with the element within the original script;

provide the event and the identifier assigned to the element associated with the
25   event to the user interface generator; and

modify the transcoded DOM in response to the modification script from the user
interface generator.

32.   A method for transcoding an electronic document having at least one element, comprising:

receiving the electronic document in a first digital format;

5   assigning a unique identifier to each element;

forming a model of a logical structure of the electronic document, wherein the model includes the identifier assigned to each element;

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using the model to produce a script, wherein the script includes at least a portion of the document expressed in a second digital format, at least one element, and the identifier assigned to the element; and

15   providing the script.

33.   The method as recited in claim 32, wherein the model also defines methods for accessing and manipulating the document.

20   34.   The method as recited in claim 32, wherein the model is a document object model (DOM).

35.   The method as recited in claim 32, wherein the first digital format is a text-based markup language.

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36.   The method as recited in claim 32, wherein the second digital format is a scripting language.

37.   A method for presenting an electronic document, comprising:

receiving the electronic document in a first digital format;

5   assigning a unique identifier to each element of the electronic document;

forming a model of a logical structure of the electronic document, wherein

elements are associated with corresponding identifiers within the model;

10   using the model to produce an original script, wherein the original script includes

at least a portion of the electronic document expressed in a second digital

format, and wherein the original script includes at least one element and the

identifier assigned to the at least one element;

15   providing the original script;

receiving an event and an identifier associated with the event;

accessing the model using the identifier associated with the event;

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using the model to produce a modification script, wherein the modification script

differs from the original script; and

providing the modification script.

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38.   A method for presenting a electronic document, comprising:

        receiving an original script, wherein the original script includes at least a portion

                of the electronic document expressed in a digital format, an element of the

5   document, and an identifier assigned to the element;

        using the original script to present the portion of the electronic document;

        generating an event in response to user input;

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        associating the event with the element;

        providing the event and the identifier assigned to the element in response to the

                event;

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        receiving a modification script; and

        using the modification script to modify the presented portion of the electronic

                document.

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39.   A method for presenting an electronic document, comprising:

        receiving the electronic document in a first digital format;

25   assigning a unique identifier to each element of the electronic document;

        forming a model of a logical structure of the electronic document, wherein

                elements are associated with corresponding identifiers within the model;

using the model to produce an original script, wherein the original script includes

at least a portion of the electronic document expressed in a second digital

format, and wherein the original script includes an element of the

document and an identifier assigned to the element;

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using the original script to present the portion of the document;

generating an event in response to user input;

10   associating the event with the element within the original script;

accessing the model using the identifier;

using the model to produce modification script; and

15   using the modification script to modify the presented portion of the document.